

Notice of Allowability

Application No.

10/650,249

Examiner

Stuart F. Baum

Applicant(s)

NEFF, MICHAEL M.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/9/2007.
2. ☒ The allowed claim(s) is/are 13, 15, 17-21, 31, 43, 46, 53, 68-71, 77-79 (renumbered 1-18).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

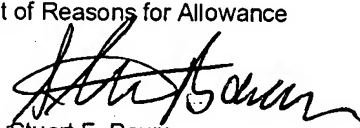
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 3/28/2007
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Stuart F. Baum

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy B. McBride on 4/25/2007.

IN THE CLAIMS:

Claim 74 has been canceled.

--Claim 13 (currently amended): A [transgenic] plant cell transformed by an expression vector comprising an isolated nucleic acid molecule in antisense orientation [OBP antisense coding nucleic acid expression vector], wherein expression of said vector in the plant cell results in an increase in the size of the resulting plant as compared to a corresponding wild-type [variety of] plant, and wherein the [OBP] nucleic acid molecule comprises [is]

(a) the nucleotide sequence shown in SEQ ID NO:1, or the complement thereof; and
(c)] or

(b) a nucleotide sequence encoding the same amino acid sequence as said nucleotide sequence of (a), but which is degenerate in accordance with the degeneracy of the genetic code.--

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--Claim 15 (currently amended): The transgenic plant cell of claim 13 wherein the [OBP] nucleic acid molecule is SEQ ID NO: 1.--

--Claim 20 (currently amended): A transgenic plant comprising [a] the plant cell according to claim [16] 13.

Claim 21 (currently amended): A seed produced by a transgenic plant comprising [a] the plant cell according to claim 13, wherein the seed comprises the expression vector and is true breeding for an increase in the size of a daughter plant as compared to a wild-type variety of plant cell.--

--Claim 31 (currently amended): A recombinant antisense expression vector comprising:

- (a) a promoter[, said promoter being] functional in a plant cell; and
- (b) [an Arabidopsis thaliana OBP3 antisense coding] an isolated nucleic acid molecule comprising SEQ ID NO:1, wherein said nucleic acid molecule is operably linked in antisense orientation to said promoter [being operably linked to said OBP3 antisense coding nucleic acid [and said antisense coding nucleic acid oriented with respect to said promoter such that the RNA produced is complementary in nucleotide sequence-to mRNA encoding Arabidopsis thaliana OBP3, wherein said OBP3 antisense coding nucleic acid comprises SEQ ID NO: 1].--

--Claim 46 (currently amended): A method for altering the size of the aerial portion of a plant without dwarfing root tissue, said method comprising:

- (a) introducing the recombinant antisense expression vector as set forth in claim 31 into a

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plant cell;

- (b) regenerating the plant cell into a transgenic plant;
- (c) evaluating the whole plant for an increase in size by comparing the plant with the introduced expression vector [obtained by introducing the nucleic acid molecule with the size of] to a corresponding wild-type plant.--

--Claim 68 (currently amended): A [transgenic] plant cell transformed with an isolated nucleotide sequence in antisense orientation, wherein the nucleotide sequence is SEQ ID NO:1 or the complement thereof, or a nucleic acid molecule encoding the same amino acid sequence as SEQ ID NO:1, but which is degenerate in accordance with the degeneracy of the genetic code, [by an antisense nucleic acid sequence complementary to a nucleic acid sequence encoding an OBP3 polypeptide,] wherein expression of said [antisense nucleic acid] nucleotide sequence in the plant cell results in an increase in the size of a resulting plant as compared to a corresponding wild-type [variety of] plant[, and wherein the nucleic acid sequence encoding the polypeptide is selected from the group consisting of:

- (a) the nucleotide sequence shown in SEQ ID NO:1, or the complement thereof; and
- (c) a nucleotide sequence encoding the same amino acid sequence as said nucleotide sequence of (a), but which is degenerate in accordance with the degeneracy of the genetic code].

Claim 69 (currently amended): The transgenic plant cell of claim 68, wherein the [nucleic acid] nucleotide sequence [encoding the OBP3 polypeptide] is SEQ ID NO:1.

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Claim 70 (currently amended): A transgenic plant comprising [a] the plant cell according to claim 68.

Claim 71 (currently amended): A seed produced by[a] the transgenic plant of claim 70, wherein the seed comprises said isolated nucleotide sequence in antisense orientation [comprising a plant cell according to claim 70].--

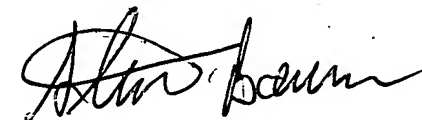
--Claim 77 (currently amended): The recombinant vector of claim 31 [76], wherein the promoter is an inducible promoter.--

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached at 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Stuart F. Baum Ph.D.
Primary Examiner
Art Unit 1638
April 25, 2007



STUART F BAUM, PH.D.
PRIMARY EXAMINER